REMARKS/ARGUMENTS

Claims 1, 2, 4-6, and 11-25 are pending. Claim 1 has been amended to include the limitation of claim 3. Claim 11 has been amended to broaden the claim so as to clarify that an entire frame of data does not need to be received before processing of the data is performed.

5 Claims 3 and 7-10 have been cancelled without prejudice or disclaimer. New claims 15 through 25 are herewith presented for examination.

In the office action mailed May 9, 2003 (paper no. 5), claims 1-14 were rejected under 35 U.S.C. 102 as being anticipated by U.S. Patent No. 6,434,165 granted to Sherer et al. (hereinafter "*Scherer*"). These rejections are respectfully traversed.

10 *Scherer* fails to provide a basis for the rejection of claims 1, 2, 4-6, and 11-25 under 35 U.S.C. 102, as it fails to disclose each element of the claimed invention. For example, claim 1 includes "a first interface for receiving data from a cable media; a pattern matching engine that evaluates patterns in the data that is received at the first interface of the cable modem and that enables the determination of appropriate procedures for treatment of the data; and wherein the

15 pattern matching engine is a programmable pattern matching engine that may be programmed according to patterns that are desired to be matched during various operations of the cable modem." The cited sections of *Sherer* disclose only a CRC checking process, which is not programmable, and which does not match "patterns that are desired to be matched during various operations of the cable modem." As disclosed in *Scherer* at col. 6, lines 11-29, CRC checking

20 comprises calculating a CRC value from a mathematical calculation at a sending device, and performing a similar verification at the receiving device to determine if the value calculated at the

6

receiving device matches the value calculated at the sending device. If the values do not match, then the frame is discarded and retransmission of the frame is requested.

In contrast, the invention of claim 1 includes a pattern matching engine "that may be programmed according to patterns that are desired to be matched during various operations of the

5   cable modem." CRC is not programmable at the receiving end, as if it were, then it would not be capable of matching the mathematical calculation performed by the sending end. *Scherer* fails to provide a basis for the rejection of claim 1 under 35 U.S.C. 102 or 35 U.S.C. 103, because it discloses that CRC checking is sufficient to determine whether the received data is acceptable or needs to be retransmitted, and fails to teach or suggest a pattern matching engine "that may be

10   programmed according to patterns that are desired to be matched during various operations of the cable modem." Claims 2, 4-6 and 15-17 are allowable at least for the reasons that they depend from an allowable base claim and add limitations not present in the prior art.

Likewise, claim 11 includes a "method for a communication device to compare a predetermined pattern to a pattern that corresponds to a portion of a data frame, the method

15   comprising: determining acceptable parameters for the data frames that are to be received at the communication device; programming the acceptable parameters into a pattern matching engine in the communication device; receiving data at the communication device; parsing the data to obtain a predetermined portion of the data; and comparing the predetermined portion of the data with the acceptable parameters stored in the pattern matching engine." Unlike CRC checking, which

20   requires the entire data frame to be received before it can be performed, claim 11 compares predetermined portions of the data with the acceptable parameters stored in the pattern matching

7

engine as it is received, thus allowing a determination to be made on whether to continue receiving the data frame. Furthermore, CRC checking does not include "comparing the predetermined portion of the data with the acceptable parameters stored in the pattern matching engine," as the CRC process performs a mathematical calculation on an entire received data frame

5 and then compares CRC data transmitted from the sending system to the CRC data generated by processing the received data frame. Thus, there are no "acceptable parameters stored in the pattern matching engine" that are compared with a "predetermined portion of the data," as nothing is stored using the CRC process that is compared to data that is received – the only comparison that is performed using the CRC process is between a value that is calculated at the

10 receiving end after processing an entire data frame with a value that is received from the sending end that is based on the entire data frame."

Scherer fails to provide basis for the rejection of claim 11 under 35 U.S.C. 102 or 35 U.S.C. 103, because it discloses that CRC checking is sufficient to determine whether the received data is acceptable or needs to be retransmitted, and fails to teach or suggest "determining

15 acceptable parameters for data frames that are to be received at the communication device; programming the acceptable parameters into a pattern matching engine in the communication device; receiving data at the communication device; parsing the data to obtain a predetermined portion of the data; and comparing the predetermined portion of the data with the acceptable parameters stored in the pattern matching engine," to compare a predetermined pattern to a pattern

20 that corresponds to a portion of the data frame. Claims 12-14, 24, and 25 are allowable at least for the reasons that they depend from an allowable base claim and add limitations not present in the prior art.

8

New claim 18 includes "A system for receiving data comprising: a programmable pattern matching engine receiving a pattern and a data stream and generating an index entry if the pattern is present in the data stream; a microprocessor reading the index entry and determining whether to continue receipt of the data stream; and a CRC engine performing CRC processing of a received data frame if the microprocessor determines to continue receipt of the data stream." *Scherer* also fails to provide a basis for the rejection of claim 18 under 35 U.S.C. 102 or 35 U.S.C. 103, because it discloses that CRC checking is sufficient to determine whether the received data is acceptable or needs to be retransmitted, and fails to teach or suggest "determining whether to continue receipt of the data stream" prior to performing CRC checking, much less "a programmable pattern matching engine receiving a pattern and a data stream and generating an index entry if the pattern is present in the data stream." Claims 19 through 23 are allowable at least for the reasons that they depend from an allowable base claim and add limitations not present in the prior art.
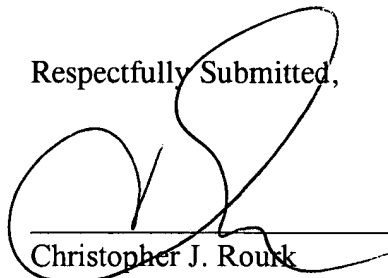
CONCLUSION

In view of the foregoing remarks and for various other reasons readily apparent, Applicant submits that all of the claims now present are allowable, and withdrawal of the rejections and a Notice of Allowance are courteously solicited.

5   If any impediment to the allowance of the claims remains after consideration of this amendment, a telephone interview with the undersigned at (214) 969-4669 is hereby requested so that such impediments may be resolved as expeditiously as possible.

A no-fee response to the pending office action was due on August 9, 2003, which fell on a Saturday. This response is filed on August 11, 2003, the following Monday, and therefore, no additional fee is believed to be due. If any applicable fee or refund has been overlooked, the Commissioner is hereby authorized to charge any fee or credit any refund to the deposit account of Akin, Gump, Strauss, Hauer & Feld, L.L.P., No. 01-0657.

Respectfully Submitted,

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10